

PLASTIC INTEGRATED CIRCUIT PACKAGE AND METHOD

AND LEADFRAME FOR MAKING THE PACKAGE

Thomas P. Glenn

ABSTRACT

5 Packages for an integrated circuit die and methods
and leadframes for making such packages are disclosed.
- The package includes a die, a die pad, peripheral metal
contacts, bond wires, and an encapsulant. The die pad
and contacts are located at a lower surface of the
10 package. The die pad and the contacts have side
surfaces which include reentrant portions and
asperities to engage the encapsulant.

A method of making a package includes providing a
metal leadframe having a die pad in a rectangular
15 frame. Tabs extend from the frame toward the die pad.
The die pad and tabs have side surfaces with reentrant
portions and asperities. A die is attached to the die
pad. The die is electrically connected to the tabs.
An encapsulant is applied to the upper and side
20 surfaces of the leadframe. Finally, the leadframe is
cut in situ so that the die pad and tabs are severed
from the frame, the sides of the package are formed,
and the package is severed from the leadframe.